

OIPE

ENTERED

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/840,669B

DATE: 06/17/2002 TIME: 13:48:54

Input Set : A:\A-690.ST25.txt

Output Set: N:\CRF3\06172002\1840669B.raw

	3 -	<110	> AP	PLIC	ANT:	KOH	NO, '	[ADA]	HIKO	/a T T	יתיםת	יירודית	סיות	TVΔጥ	TVES			
	5 ·	<120	> TI	TLE (OF I	NVEN'	TION	: AP	O-AI	/ATI	PEP.	TIDE	חבת	T A 147	- 4 ES			
	7	<130	> FI	LE R	EFER.	ENCE	: A-	690		0.0	(0.4.0	660	D					
	9	<140	> CU	RREN	T AP	PLIC	ATIO	N NU	MBER	: 09	7840	, 009	Ð					
C>	10	<141	> CU	RREN	T FI	LING	DAT	E: 2	002-	06-0	/ 00 0	20						
	12	<150	> PR	IOR	APPL	ICAT	ION	NUMB	ER:	60/T	98,9	20						
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	15	<160	> NU	MBER	of	SEQ	ID N	os:	11	2 1								
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		<210																
		<211				4												
	21	<212	> TY	PE:	DNA			_										
		<213				Homo	sap	iens										
		<220																
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		<222																
		<223					'ION:											
	30	<400	> SE	QUEN	ICE:	1							~~+	000	<i>α</i> 2 2	ata	cta	48
	31	atg	gac	aaa	act	cac	aca	tgt	cca	cct	tgt	cca	get	Dec	Glu	Tou	Len	-10
	32	Met	Asp	Lys	Thr	His	Thr	Cys	Pro	Pro	Cys	Pro	Ala	Pro	GIU	15	цец	
	23	1				5					Τ0					TJ		96
	35	ggg	gga	ccg	tca	gtc	ttc	ctc	ttc	ccc	cca	aaa	CCC	aay	yac Aan	mbr.	LOU	,,,
	36	Gly	Gly	Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro	Lys	Pro	гуѕ	30	TIIT	пец	
	37				20					25						a+ a	200	144
	39	atg	atc	tcc	cgg	acc	cct	gag	gtc	aca	tgc	gtg	gtg	gra	yac	y Ly	Sar	111
	40	Met	Ile	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val	vaı	45	АБР	Vai	Ser	
	41			35					40						aac	αtα	aaa	192
	43	cac	gaa	gac	cct	gag	gtc	aag	ttc	aac	tgg	tac	gra	yac	211	y cy	Clu	1,2
	44	His	Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp	Tyr	val	ASP	СТУ	Val	GIU	
	45		50					55					60	+	220	200	200	240
	47	gtg	cat	aat	gcc	aag	aca	aag	ccg	cgg	gag	gag	cag	uac m	aac	dor	Thr	210
	48	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	GIu	GIU	GIN	TAL	ASII	Per	80	
	49	65					70					75			+ ~ ~	/ a+a		288
	51	tac	cgt	gtg	gtc	agc	gtc	ctc	acc	gtc	ctg	cac	cag	gac	Lgg	Tou	Aan Aan	200
	52	Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	.Val	Leu	His	GIn	Asp	ттр	ьец 95	ASII	
	52					នទ					90					90		336
	55	ggc	aag	gag	tac	aag	tgc	aag	gtc	tcc	aac	aaa	gcc	CTC	CCa	gee	Dro	550
	56	Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	Lys	Ala	Leu	PIO	Ата	Pro	
	57				100					102					TIO			384
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	60	Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly	Gln	Pro	ALG	GIU	Pro	Gln	
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	63	gtg	tac	acc	ctg	ccc	cca	tcc	cgg	gat	gag	ctg	acc	aag	aac	cag	gtc	432
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CA Well man man Ten Due Due Com Ame Agn Clu Lou man Lyo Agn Clu Val	
64 Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val 65 130 135 140	
67 ago etg ace tge etg gte aaa gge tte tat eee age gae ate gee gtg	480
68 Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val	
69 145 150 155 160	
71 gag tgg gag agc aat ggg cag ccg gag aac aac tac aag acc acg cct	528
72 Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro	
73 165 170 175	
75 ccc gtg ctg gac tcc gac ggc tcc ttc ttc ctc tac agc aag ctc acc	576
76 Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr	
77 180 185 190	
79 gtg gac aag agc agg tgg cag cag ggg aac gtc ttc tca tgc tcc gtg	624
80 Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val	
81 195 200 205	
83 atg cat gag get etg cae aac cae tae aeg cag aag age ete tee etg	672
84 Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu	
85 210 215 220	
87 tct ccg ggt aaa	684
88 Ser Pro Gly Lys	
89 225	
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93 <211> LENGTH: 228	
94 <212> TYPE: PRT	
95 <213> ORGANISM: Homo sapiens	
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99 Met Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu 100 1 5 10	
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99 Met Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu 100 1 5 10 15 103 Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu 104 20 25 30	
99 Met Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu 100 1 5 10 15 103 Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu 104 20 25 30 107 Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser	
99 Met Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu 100 1 5 10 15 103 Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu 104 20 25 30 107 Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser 108 35 40 45	
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99 Met Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu 100 1 5 10 15 103 Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu 104 20 25 30 107 Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser 108 35 40 45 111 His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu 112 50 55 60 115 Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr 116 65 70 75 80	
99 Met Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu 100 1 5 10 15 103 Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu 104 20 25 30 107 Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser 108 35 40 45 111 His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu 112 50 55 60 115 Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr 116 65 70 75 80 119 Tyr Arg Val Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn	
99 Met Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu 100 1 5 10 15 103 Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu 104 20 25 30 107 Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser 108 35 40 45 111 His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu 112 50 55 60 115 Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr 116 65 70 75 80 119 Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn 120 85	
99 Met Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu 100 1	
99 Met Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu 100 1 5 10 15 103 Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu 104 20 25 30 107 Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser 108 35 40 45 111 His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu 112 50 55 60 115 Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr 116 65 70 75 80 119 Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn 120 85 90 95 123 Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro 124 100 105 110	
99 Met Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu 100 1	
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99 Met Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu 100 1 5 15 10 15 15 103 Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu 104 20 25 30 30 107 Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser 108 35 40 40 55 60 45 111 His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu 112 50 55 60 60 115 Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Glu Gln Tyr Asn Ser Thr 116 65 70 70 75 75 80 119 Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn 120 85 90 95 123 Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Arg Glu Pro 124 100 100 105 105 110 127 Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln 128 115 120 120 125 120 130 Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val 132 130 177 Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val 135 Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val 136 145 150 150 150 150 155 150 150	
99 Met Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu 100 1 5 10 15 103 Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu 104 20 25 30 107 Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser 108 35 40 40 45 111 His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu 112 50 55 60 115 Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr 116 65 70 70 75 80 119 Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn 120 85 90 95 123 Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro 124 100 105 110 127 Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln 128 115 120 125 125 131 Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val 132 130 135 140 135 Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val 136 145 150 150 155 160	
99 Met Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu 100 1	
99 Met Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu 100 1 5 10 15 103 Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu 104 20 25 30 107 Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser 108 35 40 40 45 111 His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu 112 50 55 60 115 Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr 116 65 70 70 75 80 119 Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn 120 85 90 95 123 Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro 124 100 105 110 127 Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln 128 115 120 125 125 131 Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val 132 130 135 140 135 Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val 136 145 150 150 155 160	

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147 Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val 200 195 151 Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu 152 210 215 155 Ser Pro Gly Lys 156 225 159 <210> SEQ ID NO: 3 160 <211> LENGTH: 8 161 <212> TYPE: PRT 162 <213> ORGANISM: Artificial Sequence 164 <220> FEATURE: 165 <223> OTHER INFORMATION: Preferred linker 167 <400> SEQUENCE: 3 169 Gly Gly Gly Lys Gly Gly Gly 170 1 173 <210> SEQ ID NO: 4 174 <211> LENGTH: 7 175 <212> TYPE: PRT 176 <213> ORGANISM: Artificial Sequence 178 <220> FEATURE: 179 <223> OTHER INFORMATION: Preferred linker 181 <400> SEQUENCE: 4 183 Gly Gly Asn Gly Ser Gly Gly 184 1 187 <210> SEQ ID NO: 5 188 <211> LENGTH: 8 189 <212> TYPE: PRT 190 <213> ORGANISM: Artificial Sequence 192 <220> FEATURE: 193 <223> OTHER INFORMATION: Preferred linker 195 <400> SEQUENCE: 5 197 Gly Gly Gly Cys Gly Gly Gly 198 1 201 <210> SEQ ID NO: 6 202 <211> LENGTH: 5 203 <212> TYPE: PRT 204 <213> ORGANISM: Artificial Sequence 206 <220> FEATURE: 207 <223> OTHER INFORMATION: Preferred linker 209 <400> SEQUENCE: 6 211 Gly Pro Asn Gly Gly 212 1 215 <210> SEQ ID NO: 7 216 <211> LENGTH: 18 217 <212> TYPE: PRT 218 <213> ORGANISM: Homo sapiens 220 <400> SEQUENCE: 7 222 Asp Trp Leu Lys Ala Phe Tyr Asp Lys Val Ala Glu Lys Leu Lys Glu 223 1

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TIME: 13:48:55

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Input Set : A:\A-690.ST25.txt
                    Output Set: N:\CRF3\06172002\I840669B.raw
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    236 <223> OTHER INFORMATION: Preferred embodiments
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    239 <221> NAME/KEY: misc_feature
     240 <222> LOCATION: (18)..(18)
     241 <223> OTHER INFORMATION: Fc domain attached at Position 18 through an optional linker
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     250 Ala Phe
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     263 <221> NAME/KEY: misc_feature
     264 <222> LOCATION: (1)..(1)
     265 <223> OTHER INFORMATION: Fc domain attached through optional linker
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     274 Ala Phe
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     289 <223> OTHER INFORMATION: Attached by optional linker to identical sequence, which is
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               hed by optional linker to an Fc domain
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     299 Ala Phe
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     305 <212> TYPE: PRT
     306 <213> ORGANISM: Artificial Sequence
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- 309 <223> OTHER INFORMATION: Preferred embodiments
- 311 <220> FEATURE:
- 312 <221> NAME/KEY: misc_feature
- 313 <222> LOCATION: (1)..(1)
- 314 <223> OTHER INFORMATION: Attached by optional linker to Fc domain at the N-terminus.
- 318 <220> FEATURE:
- 319 <221> NAME/KEY: misc_feature
- 320 <222> LOCATION: (18)..(18)
- 321 <223> OTHER INFORMATION: Attached by optional linker to an identical sequence
- 324 <400> SEQUENCE: 11
- 326 Asp Trp Leu Lys Ala Phe Tyr Asp Lys Val Ala Glu Lys Leu Lys Glu
- 327 1 5 10 15
- 330 Ala Phe

VERIFICATION SUMMARY

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DATE: 06/17/2002 TIME: 13:48:56

PATENT APPLICATION: US/09/840,669B

Input Set : A:\A-690.ST25.txt
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L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date